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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/425,302	10/25/99	TOMOYUKI N	501.34746CX1

020457 TM02/0228
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EXAMINER	
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ART UNIT	PAPER NUMBER
2164	7

DATE MAILED: 02/28/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.	Applicant(s)
09/425,302	Tomoyukl et al
Examiner	**Group Art Unit**
Geoffrey Akers	2164

☒ Responsive to communication(s) filed on *Oct 22, 1999*

☐ This action is **FINAL.**

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire *3* month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

☒ Claim(s) *10 and 19-35* is/are pending in the applicat

Of the above, claim(s) _____ is/are withdrawn from consideration

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) *10 and 19-35* is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been

☒ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). *4*

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> > (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 25, 27, 30 are rejected under 35 USC 102(b) as anticipated by Halpern(US Pat. No: 4,906,828).

3. As per claim 25 Halpern teaches an IC card used in an electronic purse loan system, comprising a balance memory which stores electronic data representing a money balance(col 14 lines 6-17) a loan memory which stores electronic data of a loan and a processor which writes electronic data of a loan into said loan memory when said electronic data representing a money balance is less than the amount of money required for a transaction(col 14 lines 33-40)(Fig. 10).

4. As per claim 27 Halpern teaches an IC card according to claim 25, further comprising: a connector which inputs/outputs electric money data from/to an external terminal in said electric purse loan system(Fig. 10)(col 10 lines 19-53).

5. As per claim 30 Halpern teaches an IC card according to claim 25, wherein said electronic data of a loan includes electronic money information representing the upper limit of a loan(col 13 lines 14-30)(Fig 11).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 10, 19-21, 23-24, 28, 32-35 are rejected under 35 USC 103(a) as unpatentable over Halpern(US Pat. No: 4,906,828) in view of Nagata(US Pat. No: 5,140,517).

8. (Twice Amended) As per claim 10 Halpern teaches an electronic purse loan device(col 1 line 33-col 2 line 2) using [system, comprising:] an IC card [provided with] having a balance information storage which stores [for storing an ID number and] electronic money information(col 1 lines 48-51) representing [including the amount of a balance[;] and a loan information storage which stores information representing loan, [a terminal](col 1 lines 52-53)(col l line 66-col 2 line 2) comprising: an IC card [reading/writing means for reading] reader/writer which reads information stored in said IC card(Fig 2) and [writing] writes information to said IC card(Fig 5)[input means for inputting a numeric value and other information personal information storage means for storing the ID numbers of IC cards in correspondence with information of a loan amount(col 3 lines 19-23). Nagata teaches correlation means for correlating the ID number of said IC card with the ID numbers stored in said personal information storage means(Fig 7/526/527/525) to access the information of a loan amount stored in said personal information storage means]; [wherein] and a processor which, when [a payment

for] a commercial transaction is made, [said terminal] subtracts an amount(Fig. 8B/554) [equivalent to the amount] of money to be paid for said commercial transaction from [the amount of the] said balance [stored in said IC card using said IC card reading/writing means] information storage: wherein said IC card reader/writer writes information representing a loan into said loan information storage(Fig 8B/555) when said electronic money information representing a balance is less than said amount of money to be paid for the commercial transaction(Fig 8B/560/561/562)(Fig 12).It would have been obvious to one skilled in the art at the time of the invention to combine Halpern in view of Nagata to teach the above. The motivation for this is to describe an electronic purse employed for electronic funds deductions used to make loans.

9. As per claim 19 Halpern teaches an electronic purse loan device according to claim 10, wherein said processor checks whether or not said IC card is registered(col 3 line 59-col 4 line 2)(col 10 lines 49-54).It would have been obvious to one skilled in the art at the time of the invention to combine Halpern in view of Nagata to teach the above. The motivation for this is to describe an electronic purse employed for electronic funds deductions used to make loans.

10. As per claim 20 Halpern teaches an electronic purse loan device according to claim 10, wherein said processor checks said information representing a loan stored in said IC card and inhibits the commercial transaction if the amount of money to be paid for it is greater than a predetermined amount of money(col 13 lines 14-29)(Fig 11).It would have been obvious to one skilled in the art at the time of the invention to combine Halpern in view of Nagata to teach the

above. The motivation for this is to describe an electronic purse employed for electronic funds deductions used to make loans.

11. As per claim 21 Halpern teaches an electronic purse loan device according to claim 10, wherein said processor checks said information representing a loan stored in said IC card and inhibits a loan if the amount of money to be paid is greater than a predetermined amount of money(col 13 lines 14-29)(Fig 11/170/171/155/147). Halpern fails to teach that the term of the loan is greater than a predetermined term.It would have been obvious to one skilled in the art at the time of the invention to combine Halpern in view of Nagata to teach that if the term of the loan is greater than a predetermined period, the loan is inhibited, since an amount of money in excess of a threshold is reached as taught in Fig 11. The motivation for this is to describe an electronic purse employed for electronic funds deductions used to make loans.

12. As per claim 23 Nagata teaches an electronic purse loan device according to claim 10, wherein said processor liquidates a loan when the next commercial transaction occurs(col 9 lines 39-58)(Fig. 8B/S55/S56). It would have been obvious to one skilled in the art at the time of the invention to combine Halpern in view of Nagata to teach the above. The motivation for this is to describe an electronic purse employed for electronic funds deductions used to make loans.

13. As per claim 24 Halpern teaches an electronic purse loan device according to claim 10, further comprising a display which displays information indicating that said electronic money information representing a balance is less than said amount of money to be paid for said commercial transaction(Fig 2/29/31).It would have been obvious to one skilled in the art at the

time of the invention to combine Halpern in view of Nagata to teach the above. The motivation for this is to describe an electronic purse employed for electronic funds deductions used to make loans.

14. As per claim 28 Halpern teaches an IC card according to claim 25, further comprising: register information as card serial number and operations data for a person(col 3 line 59-col 4 line 9).Nagata teaches an ID number memory which stores the ID number registered for a person(col 6 lines 13-25).It would have been obvious to one skilled in the art at the time of the invention to combine Halpern in view of Nagata to teach the above.. The motivation for this is to describe an electronic purse employed for electronic funds deductions used to make loans.

15. As per claim 32 Halpern teaches an electronic purse loan system(col 1 line 33-col 2 line 2) using an IC card having a balance information storage which stores electronic information representing a money balance(col 1 lines 48-51) and a loan information storage which stores information representing a loan, comprising: (a) a terminal (col 1 lines 52-53)(col 1 line 66-col 2 line 2) an IC card reader/writer which reads information stored in said IC card and writes information to said IC card(Fig 5). Nagata teaches a processor which, when a commercial transaction is made, subtracts an amount of money(Fig 8B/554) to be paid for said commercial transaction from said balance information storage and a center having a storage which stores money information and loan information transmitted from said terminal, wherein said terminal writes electronic information of a loan into said loan information storage and transmits loan information corresponding to said loan to said center when said electronic information

representing a money balance is less than the amount of money to be paid for said commercial transaction(Fig 8B/560/561/562)(Fig. 12).It would have been obvious to one skilled in the art at the time of the invention to combine Halpern in view of Nagata to teach the above. The motivation for this is to describe an electronic purse employed for electronic funds deductions used to make loans.

16. As per claim 33 Nagata teaches an electronic purse loan device according to claim 32, wherein said processor liquidates a loan when the next commercial transaction occurs(col 9 lines 39-58)(Fig. 8B/S55/S56). It would have been obvious to one skilled in the art at the time of the invention to combine Halpern in view of Nagata to teach the above. The motivation for this is to describe an electronic purse employed for electronic funds deductions used to make loans.

17. As per claim 34 Halpern teaches an electronic purse loan system according to claim 32, wherein said electronic data of a loan includes electronic money information on the upper limit of a loan(col 13 lines 14-30)(Fig. 11). Halpern fails to teach further comprising a center processor in said center, wherein said center processor checks date information relating to a loan and approves the loan when said date information is within a predetermined term.It would have been obvious to one skilled in the art at the time of the invention to combine Halpern in view of Nagato to determining an upper limit on the term of a loan equivalent to a ceiling on expenditures stored in the card.The motivation for this is to describe an electronic purse employed for electronic funds deductions used to make loans.

18. As per claim 35 Halpern teaches an electronic purse loan system according to claim 32 further comprising a center processor in said center, wherein said center processor checks said information representing a loan and approves a loan when said information is within a predetermined upper limit(col 13 lines 14-30)(Fig 11).It would have been obvious to one skilled in the art at the time of the invention to combine Halpern in view of Nagata to teach the above. The motivation for this is to describe an electronic purse employed for electronic funds deductions used to make loans.

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19. Claims 29 and 31 are rejected under 35 USC 103(a) as unpatentable over Halpern(US Pat. No: 4, 906,828).

20. As per claim 29 Halpern teaches an IC card according to claim 25, wherein said transaction is includes debiting transactions(col 3 line 9-12). Halpern fails to teach specifically that these operatrions are a train fare or a bus fare.It would have been obvious to one skilled in the art at the time of the invention to teach that these debiting operations are applied to train or bus fare transactions. The motivation is to use the card to transfer electronic cash to pay fares.

21. As per claim 31 Halpern teaches an IC card according to claim 25, wherein said electronic data of a loan includes electronic money information representing the upper limit of a loan(col 13 lines 14-30)(Fig 11).Halpern fails to teach that the data of a loan includes information representing the term limit of a loan. It would have been obvious to one skilled in the art at the time of the invention that if the term of the loan exceeds an upper limit an aggregate amount of

money will be expended in excess of a threshold as taught into Fig 11.The motivation is to use the card to transfer electronic cash to pay fares.

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22. Claims 22 and 26 is rejected under 35 USC 103(a) as unpatentable over Halpern(US Pat. No: 4,906,828) in view of Nagata(US Pat. No: 5,140,517) and further in view of Jachimowicz(US Pat. No: 5,789,733).

23. As per claim 22 Nagata teaches an electronic purse loan device according to claim 10, wherein said IC card reader/writer reads from/writes to the information stored in said IC card(Fig. 5/15/10/1/14/24)(col 7 line 63-col 8 line 64).Nagata fails to teach without contacting said IC card. Jachimowicz teaches reading/writing information in an IC card without contact(col 1 lines 62-col 2 line 12).It would have been obvious to one skilled in the art at the time of the invention to combine Halpern in view of Nagata and further in view of Jachimowicz to teach the above. The motivation for this is to describe an electronic purse employed for electronic funds deductions used to make loans.

24. As per claim 26 Halpern teaches an IC card according to claim 25, further comprising: a data input/output circuit which inputs/outputs electronic data representing money from/to an external terminal in an electric purse loan system(Fig 2). Halpern fails to teach I/O communication with the IC card without contact. Jachimowicz teaches reading/writing information in an IC card without contact(col 1 lines 62-col 2 line 12).It would have been obvious to one skilled in the art at the time of the invention to combine Halpern in view of Jachimowicz to teach the above. The

motivation for this is to describe an electronic purse employed for electronic funds deductions used to make loans.

Conclusion

25. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

-Claus teaches secure momney transfer techniques using smart cards

-Corder teaches a smart card system and method for transferring value

-Pitroda teaches a universal electronic transaction card

Any comments regarding this communication should be addressed to the examiner, Dr. Geoffrey Akers, P.E. who can be reached at (703)-306-5844 between the hours of 6:30 AM and 5:00 PM Monday through Friday. If attempts to contact the examiner are unsuccessful, the examiner's supervisor, Mr. Vincent Millin, may be telephoned at (703)-308-1065.

GRA

February 12, 2001

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